REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 21 and 22 are requested to be cancelled. Claim 1 is currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Accordingly, claims 1-4, 6-12, 14-15, 19 and 20 are submitted for reconsideration.

In the Office Action, claims 1-4, 6-12, 14-15, 19 and 20 were rejected under 35 U.S.C. § 112, ¶ 1. In particular, the Examiner asserted that there is no support for the limitation in claim 1 that the specimen holder be configured to contain an "overpressure" of at least 2000 bar. Applicant has amended claim 1 to recite that "the receptacle is configured to be able to contain a pressure of up to 2000 bar." Applicant submits that this recitation, as amended, is fully supported by the specification of the present application and does not constitute new matter. Accordingly, Applicant requests that the rejection of the pending claims under 35 U.S.C. § 112, ¶ 1 be withdrawn.

Claims 1-2 and 9-11 were rejected under 35 U.S.C. § 102(b) as being anticipated by Goodman et al. (U.S. Patent No. 5,255,783). Claim 1, as amended, recites that a specimen holder configured for holding a water-containing biological specimen during high-pressure freezing of the specimen comprises at least two shaped parts detachably joinable to one another, wherein the joined shaped parts form a receptacle for holding the biological specimen, wherein at least one of the shaped parts comprises a diamond material, wherein the diamond material forms at least part of a first inner surface of the receptacle, and wherein the receptacle is configured to be able to contain a pressure of up to 2000 bar.

As explained in the Amendment filed on January 21, 2004, Goodman discloses an evacuated semiconductor wafer container 10 that may be evacuated, or "a portion of the gas

within the [container 10] may be removed and then subsequently replaced with an inert gas..." (col. 2, lines 41-62). Goodman does not teach, suggest, or disclose that the container 10 is configured for holding a water-containing specimen during high-pressure freezing of the specimen, nor does the Examiner provide any reason or suggestion as to how or why one of ordinary skill in the art would have used the container of Goodman for holding a water-containing specimen during high-pressure freezing of the specimen.

As also explained in the prior Amendment, the container 10 of Goodman is simply incapable of high-pressure freezing. The walls of the container 10 are formed of a moldable plastic (col. 2, lines 30-32). In particular, the cover 12 has a thin panel portion 27 such that its thinness "causes the panel to act like a flexible membrane so as to flex under conditions of vacuum pressure..." (col. 3, lines 14-28). The walls of the cover 12 may have a thickness in the range of 0.050 to 0.075 inches and the panel portion 27 may have a thickness in the range of 0.010 to 0.040 inches (col. 3, lines 28-35). Clearly, at any pressure substantially greater than standard pressure, the container will either rupture at the panel portion 27 or blow open via joining edge portions 11.1, 12.1 (Figs. 1 and 6).

Notwithstanding these points, the Examiner asserted in the rejection that a very weakly constructed receptacle can contain an extremely high pressure or overpressure when the pressure on the exterior is the same, such as a receptacle with an internal pressure of 2000 bar when the receptacle is placed within an external pressure of 2000 bar. First of all, to place the container of Goodman with an internal pressure of 2000 bar in an external pressure of 2000 bar would typically require the container to be able to withstand the internal pressure of 2000 bar before the placement in the external pressure of 2000 bar. To apply such an argument as a basis for asserting that the container of Goodman can contain a pressure of 2000 bar is tantamount to making the corresponding limitation in claim 1 meaningless. In other words, what is the point of having a container configured to be able to contain a pressure of 2000 bar if any container, no matter how weakly constructed, is capable of doing so as long as the same high pressure is applied externally and internally to the container. It also makes no sense to have a container configured to be able to contain a pressure of 2000 bar for holding a water-containing biological specimen during high-pressure freezing if the container also required the external pressure to be 2000 bar to avoid rupturing. If such an

external pressure was truly required, than the configuration of the container would be irrelevant, which is not the case because claim 1 expressly requires the container to be configured to contain a pressure up to 2000 bar.

Such an interpretation is also inconsistent with the plain meaning of the claim as well as the specification of the present application. Being configured to be able to contain a pressure of 2000 bar clearly means the container can tolerate such a pressure regardless of the external conditions. In contrast, as explained above, the container of Goodman cannot contain a pressure of 2000 bar without rupturing. Accordingly, independent claim 1, and all claims dependent therefrom, are believed to be patentable over Goodman.

Claims 1-4 and 7-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kim (U.S. Patent No. 5,938,058) in view of Goodman. As also explained in the prior Amendment, Kim discloses a segmented multi-purpose portable container for storing small miscellaneous articles, such as toothbrushes, combs, and toothpaste (col. 3, lines 28-31). Thus, like Goodman, Kim does not teach, suggest, or disclose a specimen holder configured for holding a water-containing biological specimen during high-pressure freezing of the specimen.

As in the prior Office Action, the Examiner again asserted that it would have been obvious to import the diamond coating of Goodman into the container of Kim "in order to form a hard, nearly perfect chemically resistant coating which has a low coefficient of friction to resist breakage, cracks and tearing, to resist chemical reaction and to assist in the low friction release of the specimen." In light of the fact that neither Goodman or Kim disclose or suggest a specimen holder configured for holding a water-containing biological specimen during high-pressure freezing of the specimen, it is simply not understood why one of ordinary skill in the art would be motivated to modify a container for holding toiletries, as disclosed by Kim, to have "a hard, nearly perfect chemically resistant coating which has a low coefficient of friction to resist breakage, cracks and tearing, to resist chemical reaction and to assist in the low friction release of the specimen." Nor has the Examiner provided any disclosure or suggestion from either reference for the motivation to modify the container of

Kim in the manner suggested by the Examiner. Without such a motivation, a prima facie case of obviousness cannot be made.

Moreover, as in the rejection made solely over Goodman, the Examiner again made the assertion that a very weakly constructed receptacle can contain an extremely high pressure of overpressure when the pressure on the exterior is the same, such as a receptacle with an internal pressure of 2000 bar when the receptacle is placed within an external pressure of 2000 bar. As discussed above, this assertion seeks a claim interpretation completely inconsistent with the plain meaning of the corresponding limitation in claim 1 and the applicable description from the specification of the present application. Accordingly, for all of these reasons, independent claim 1, and all claims dependent therefrom, are believed to be patentable over Kim and Goodman.

Finally, claims 1-4, 6-12, 14, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linner et al. (U.S. Patent No. 5,044,165) in view of Goodman. Linner shares the same deficiencies as Goodman and Kim. Like those two references, Linner does not teach, suggest, or disclose high-pressure freezing. Rather, Linner discloses a "cryo-slammer" in which a biological sample is slammed or plunged against a cryogenically cooled surface, wherein a shutter 65 is opened when the pressure inside a vacuum chamber 21 reaches atmospheric pressure (Abstract, Fig. 14, and col. 16, lines 8-61). Further, like the containers of Goodman and Kim, which are not configured to contain a pressure of 2000 bar, it is clear that the shutter 65 of Linner would blow off if a high pressure were applied to the inside of the vacuum chamber 21. In other words, the cryo-slammer of Linner is simply incapable of high-pressure freezing of a water-containing specimen.

In addition to the same argument about a weak container being able to contain a pressure of 2000 bar if the external pressure was also 2000 bar, the Examiner also asserted that it would have been obvious to increase the thickness of the parts of Linner to make the parts stronger and able to withstand high pressure differentials. Problematically, the Examiner has not provided any motivation as to why one of ordinary skill in the art would have been motivated to modify the parts of Linner in such a manner nor pointed to any disclosure or suggestion in either Linner or Goodman for such a motivation. The lack of

motivation is unsurprising given that neither reference discloses or suggests anything to do with operations under high pressure differentials or high pressure freezing. Thus, a prima facie case of obviousness cannot be made over the combination of Linner and Goodman Accordingly, for all of these reasons, independent claim 1, and all claims dependent therefrom, are believed to be patentable over Linner and Goodman.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 6/25/04

By _____

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